



Durham County

Stormwater Ordinance

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Durham County Engineering Department – Stormwater & Erosion Control Division
120 E. Parrish Street, 1st Floor, Durham, North Carolina 27701
Office: 919/560-0735 Fax: 919/560-0740
www.durhamcountync.gov/ceng

ARTICLE V. STORMWATER MANAGEMENT

Sec. 14-150. Purposes.

- (a) To establish and implement a program which will protect and enhance the quality of surface waters by controlling the amount of new and existing stormwater runoff.
- (b) To improve the water quality of the surface waters by identifying and eliminating illegal discharges to the basin through stormwater collection systems.
- (c) To maintain and protect the riparian areas.

(Ord. of 2-26-01, § 1)

Sec. 14-151. Definitions.

[Unless the context requires otherwise, the following words as used in this article have the indicated meanings:]

Act means G.S. ch. 143, pt. 1, art. 21, as they concern stormwater management and the implementing rules for same in the North Carolina Administrative Code.

Built-upon area means that portion of a development that is covered by impervious, or partially impervious, cover, including buildings, pavement, gravel areas, recreational facilities, etc.

Developer means:

- (1) The person who has, or holds himself out as having, financial or operational control over the land-disturbing activity;
- (2) The landowner or person in possession or control of the land when he directly or indirectly allowed the land-disturbing activity, has benefited from it, or has failed to comply with any provision of this article or the act;
- (3) The person listed on the stormwater permit as having financial or operational control for a development; and/or
- (4) The person owning property containing permitted stormwater control measures.

Development means any land disturbing activity which adds to, or changes, the amount of impervious, or partially impervious cover on a land area, or which otherwise decreases the infiltration of precipitation into the soil. This includes, but is not limited to: tree removal, grubbing, stump removal, removal of topsoil, coarse or fine grading, erection of structures and construction of roads.

Discharge means the addition of any man-induced waste effluent, either directly or indirectly, to state surface waters.

Inspect means inspection, observation, monitoring, testing, sampling, surveying, and otherwise measuring compliance with the provisions of this ordinance, the Act, and implementing rules.

Neuse River Basin means land which drains to the Neuse River, as determined by the Durham Planning Department and as shown on a map which is maintained by the Durham Planning Department.

One-year 24-hour storm means the surface runoff resulting from a rainfall of an intensity expected to be equaled or exceeded, once a year, and of a duration which will produce the maximum peak runoff flow from the watershed of interest under average antecedent wetness conditions. Acceptable methodologies for computing these flow rates include:

- (1) The rational method, which may be used for drainage areas of 200 acres or less;
- (2) The peak discharge method as described in the USDA Soil Conservation Service's Technical Release Number 55, which may be used for drainage areas of 2,000 acres or less; and
- (3) The Putnam Method, which may be used for drainage areas greater than 2,000 acres.

Stormwater means the flow of water which results from precipitation and which occurs immediately following rainfall or snowmelt.

Stormwater collection system means any conduit, pipe, channel, curb, or gutter for the primary purpose of transporting (not treating) runoff. A stormwater collection system does not include vegetated swales, swales stabilized with armoring or alternative methods where natural topography prevents the use of vegetated swales (subject to case-by-case review), curb outlet systems, or pipes used to carry drainage underneath built-upon surfaces that are associated with development controlled by the provisions of 15A N.C.A.C. 2H.1003(c)(1).

(Ord. of 2-26-01, § 1)

Sec. 14-152. Enforcement and administration.

- (a) The stormwater administrator, or his designee, is hereby authorized to enforce and administer the provisions of this article, and associated ordinances of the County of Durham concerning stormwater management unless a contrary intention is expressed in such other ordinances.
- (b) The stormwater administrator shall be responsible for complying with the mandates of Subchapter 2B of Title 15A of the North Carolina Administrative Code and G.S. ch. 143, art. 21, as they detail standards for local stormwater programs, including annual reporting requirements.
- (c) Whenever conflicts exist between federal, state or local laws, ordinances or rules, the more restrictive provision shall apply.
- (d) All fees for permits and plans shall be established by the board of county commissioners.

(Ord. of 2-26-01, § 1)

Sec. 14-153. Design and performance standards.

(a) Durham County has been included in the Neuse River Nutrient Sensitive Waters Management Strategy. Accordingly, developments within this article's jurisdiction are subject to specific requirements established in the act and its implementing rules. The following requirements shall apply to developments within the Neuse River Basin:

- (1) Developments shall plan for, and implement, stormwater management controls which will limit the nitrogen load of runoff to 3.6 pounds/acre/year.

Developers who have obtained an offset by participation in the North Carolina Wetland Restoration Fund established by the North Carolina Department of Environment and Natural Resources, shall plan for and implement management controls which will limit the nitrogen load of runoff from the site to six pounds/acre/year for residential development and ten pounds/acre/year for commercial or industrial development. Nitrogen export calculations shall be made using a formula approved by the stormwater administrator.

(2) Developments shall plan for and implement stormwater management controls which will ensure that there is no net increase in peak flow leaving the site from the predevelopment conditions for the one-year 24-hour storm, of more than ten percent. If the development results in an increase of greater than ten percent, the developer will be responsible for installing measures which will result in no net increase. The same methodology must be used for calculating both the pre- and post-development flow rates.

(3) Plans for developments shall protect and maintain existing riparian areas in accordance with 15A N.C.A.C. 2B.0233 which is hereby incorporated by reference, as well as the requirements of the Durham City-County Zoning Ordinance. Consistent with the requirements of 15A N.C.A.C. 2B.0233, no developments shall be approved which are proposed within the first 50 feet adjacent to a waterbody that is shown on the most recent version of either the U.S.G.S. 7 ½-minute quadrangle topographic map or the U.S.D.A. Soil Survey of Durham County, North Carolina, unless the developer can demonstrate to the stormwater administrator's satisfaction that the state division of water quality has approved the development.

(b) The following requirements shall apply to developments outside the Neuse River Basin:

(1) Developments shall plan for and implement stormwater management controls which will ensure that there is no net increase in peak flow leaving the site from the predevelopment conditions for the one-year 24-hour storm, of more than ten percent. If the development results in an increase of greater than ten percent, the developer will be responsible for installing measures which will result in no net increase. The same methodology must be used for calculating both the pre- and post-development flow rates.

(2) Plans for developments shall protect and maintain existing riparian areas. No developments shall be approved which are proposed within the first 50 feet adjacent to a waterbody that is shown on the most recent version of either the U.S.G.S. 7 ½-minute quadrangle topographic map or the U.S.D.A. Soil Survey of Durham County, North Carolina.

(3) Notwithstanding the foregoing, developments may be approved within the first 50 feet adjacent to a waterbody that is shown on the most recent version of either the U.S.G.S. 7 ½-minute quadrangle topographic map or the U.S.D.A. Soil Survey of Durham County, North Carolina provided:

(a) For streams, a stream delineation is performed by a person selected by the county engineer from an approved list, which is to be compiled by the county engineer, to do stream delineations and presented to the county engineer which, to the county engineer's satisfaction, shows that the stream shown on the most recent version of either the U.S.G.S. 7 ½-minute quadrangle topographic map or the U.S.D.A. Soil Survey of Durham County, North Carolina does not exist. Any person requesting

such stream delineation to be performed as provided in this subsection shall make application to the county engineer for the stream delineation to be done and shall pay a fee to cover the cost of said delineation in an amount as determined by the board of commissioners.

(b) For ponds and lakes, that the ponds or lakes are manmade and are located outside natural drainage ways.

(Ord. of 2-26-01, § 1; Ord. of 4-12-04, § 1)

(4) High Density Developments, defined as those with greater than 24 percent impervious surface, located outside of the Water Supply Watershed Overlays as established in Durham County Unified Development Ordinance Section 4.11.2.A, shall use stormwater management systems that control and treat runoff from the first one (1) inch of rain to remove an eighty-five percent (85%) average annual amount of total suspended solids (TSS).

(Ord. of 5-14-07, § 1)

Sec. 14-154. Proposed development review.

(a) All proposed developments within the jurisdiction of Durham County shall be subject to this ordinance and shall be reviewed by the stormwater administrator, or his designee, for conformance with this article, Subchapter 2B of Title 15A of the North Carolina Administrative Code and G.S. ch. 143, art. 21, where the development:

(1) Disturbs greater than one acre of land in order to establish, expand, or modify a single-family or duplex residential development or a recreational facility;

(2) Disturbs greater than one-half acre of land in order to establish, expand, or modify a multifamily residential development or a commercial, industrial, or institutional facility; or

(3) Includes a stormwater collection system.

(b) Proposed developments consisting solely of agriculture, mining, or forestry activities shall not be subject to review.

(Ord. of 2-26-01, § 1)

Sec. 14-155. Permit requirements.

(a) No person shall undertake any development subject to this article without first obtaining a permit therefore from the stormwater administrator, or their designee. Permits must be maintained for the life of the development and shall be reviewed and renewed every ten years from the date the initial permit was issued.

(b) A stormwater permit may be obtained upon submitting the fee, zoning compliance check off issued by the Durham City-County Planning Department, if required, statement of financial responsibility and ownership, development plan, and the stormwater control plan. A proposed development affecting riparian buffer areas, as detailed in 15A N.C.A.C. 2B.0233 shall also be accompanied by proof that it has been approved by the Division of Water Quality of the North Carolina Department of the Environment and Natural Resources.

(c) The applicant shall submit three copies of the permit application, including the control plan, to the stormwater administrator, or their designee, at least 30 days prior to commencement of the proposed development. The stormwater administrator, or their designee, shall review permit applications for developments and, within 30 calendar days of receipt thereof, shall notify the person submitting the application that it has been approved, approved with modifications, or disapproved. If the permit application is disapproved the reasons for this action will be stated with particularity in writing.

(d) No permit shall be issued until such time as the stormwater administrator or their designee is assured that the proposed development will be carried out in accordance with this article and the approved stormwater control plan.

(e) Improvement security. The stormwater administrator, or their designee, shall require security to assure performance of the continuing conditions of the permit. The applicant shall be required to file an improvement security in the form of a performance bond, executed by one or more surety companies legally authorized to do business in the State of North Carolina and approved by the county attorney. The amount shall be deemed sufficient by the stormwater administrator, or their designee, to cover all costs of constructing and maintaining the stormwater control measures required by the permit for conformity with the standards specified in this article. A performance bond(s) shall be maintained by the applicant to provide for continuous improvement security for the life of the development. At the time of renewal of the permit pursuant to subsection 14-155(a), the amount of the performance bond shall be recalculated and revised to reflect any increase in the costs of construction or maintenance and shall be in the amount specified by the stormwater administrator, or their designee. No improvement security shall be required from an applicant which is a federal, state or county governmental entity, or is a school board.

(Ord. of 2-26-01, § 1; Ord. of 2-10-03, § 1; Ord. of 4-10-06, § 1)

Sec. 14-156. Plan submission procedures.

(a) A stormwater measures control plan shall be prepared for all land-disturbing activities subject to this article, as defined in section 14-154.

(b) The stormwater administrator's office will review each complete plan submitted to it and within 30 days of receipt thereof will notify the person submitting the plan that it has been approved, approved with modifications, approved with performance reservations or disapproved. Failure to approve or disapprove a stormwater control plan within 30 days of receipt shall be deemed approval. Disapproval of a plan shall specifically state in writing the reasons for disapproval. The stormwater administrator, or their designee, shall approve, approve with modifications, or disapprove a revised plan within 15 days of receipt, or it is deemed to be approved.

(c) Plans for which no permit has been issued shall expire one year from the approval date.

(d) One copy of the approved plan shall be kept on file at the job site.

(e) After approving the plan, if the stormwater administrator, or their designee, upon inspection of the job site, determines that the measures will not be effective, the stormwater administrator, or their designee, may require a revised plan. Pending the preparation of the revised plan, work shall cease or shall continue only under conditions outlined by the stormwater administrator, or their designee.

(f) The plan required by this section shall contain architectural and engineering drawings, maps, assumptions, calculations and narrative statements as needed to adequately describe the proposed development of the tract and the measures planned to comply with the requirements of this article. Plan content may vary to meet the needs of specific site requirements. Detailed guidelines for plan preparation may be obtained from the stormwater administrator, or their designee, on request.

(g) Stormwater control plans shall be prepared by, and bear the seal and signature of, a registered professional engineer, registered landscape architect, or registered architect.

(Ord. of 2-26-01, § 1)

Sec. 14-157. Maintenance and obstruction of stormwater collection systems.

(a) During the development of a site, the developer shall install and maintain all temporary and permanent stormwater control measures as required by the approved plan or any provision of this article, the Act or any order adopted pursuant to this article or the Act. After site development, the developer shall install and/or maintain all necessary permanent stormwater control measures specified in the approved plan, except those measures installed within a road or street right-of-way or easement accepted for maintenance by a governmental agency. Conveyance of the property shall not terminate the original developer's obligations under this article until such time as a replacement permit is approved by the stormwater administrator. The original developer shall include in the deed conveying the property notice of the existence of the stormwater control measures and the purchaser's obligations to maintain and inspect them and to obtain a permit and otherwise comply with the terms of this article.

(b) The developer shall have the stormwater control measures inspected, by a registered professional engineer, a registered land surveyor, or a registered landscape architect, upon completion of their construction, and shall have additional inspections conducted to certify their maintenance and continued function per a schedule established by the stormwater administrator, or their designee, but at least annually. The developer shall transmit to the stormwater administrator a copy of all inspection reports within three working days of their being conducted.

(c) It is unlawful for any person to place any obstruction in any stormwater collection system so as to obstruct or impede the free flow of surface water, unless same has been authorized by the stormwater administrator, or their designee.

(d) If the stormwater administrator, or their designee, finds any stormwater collection system constructed, arranged, clogged, or in such disrepair as to impede, obstruct, or hinder the free flow of surface water in a manner which conflicts with acceptable engineering practices, or if a planned and permitted stormwater control measure has not been installed per an approved plan, he shall give written notice to the developer of the property. This notice shall specify the problem and action necessary to remedy it, as well as the time frame for taking such corrective action and the potential for additional action under sections 14-160 and 14-162 of this article.

(Ord. of 2-26-01, § 1)

Sec. 14-158. Illegal discharges.

(a) It is unlawful for any person to empty or deposit in any stormwater collection system, directly or indirectly, any substance, liquid or solid, which by reason of its nature:

- (1) Is, or may become, a public health hazard endangering human or animal health;
- (2) Is a nuisance, including substances which are unsightly or malodorous, or may become so;
- (3) Interferes, or may interfere, with the free and rapid flow of surface water;
- (4) Is flammable or explosive;
- (5) Is toxic to plant or animal life;
- (6) Is corrosive, or has properties which may damage or render unsightly the stormwater collection system; or
- (7) Affects adversely the State of North Carolina classification of the stream into which the stormwater collection system discharges.

(b) Any developer, or other person, who makes, directly, or indirectly, an illegal discharge into a stormwater collection system shall be subject to both civil and criminal penalties as provided in section 14-160 of this article.

(c) The developer is responsible for taking immediate action to report and remove an illegal discharge occurring on its property, regardless of the source of same. Upon receiving any report of an illegal discharge the stormwater administrator shall issue notice to the developer. This notice shall specify the problem and action necessary to remedy it, as well as the time frame for taking such corrective action and the potential for additional action under sections 14-160 and 14-162 of this article.

(Ord. of 2-26-01, § 1)

Sec. 14-159. Inspections and investigations.

(a) Agents, officials or other qualified persons authorized by the stormwater administrator may periodically inspect public and private property in order to ensure compliance with the Act, this ordinance or rules or orders adopted or issued pursuant to this ordinance, and to determine whether the measures required have been implemented and are effective in achieving the goals of this ordinance.

(b) No person shall willfully resist, delay or obstruct an authorized representative, employee or agent of Durham County while that person is lawfully inspecting, or attempting to inspect, a development or installed stormwater collection system under this article.

(Ord. of 2-26-01, § 1)

Sec. 14-160. Penalties.

(a) *Civil penalties.*

(1) Any person who violates any of the provisions of this article, or rules or orders adopted or issued pursuant to this article or who initiates or continues a development for which a stormwater control plan and/or permit is required except in accordance with the terms, conditions and provisions of an approved plan and/or permit shall be subject to a civil penalty. The maximum civil penalty for a violation is \$5,000.00 per day.

(2) No penalty shall be assessed until the person alleged to be in violation has been notified of the violation as provided in section 14-157 of this article. If after the allotted time period has expired, the violator has not completed corrective action, a civil penalty may be assessed from the date the violation was detected. However, no time period for compliance need be given for failure to submit a stormwater control plan for approval, for failure to obtain a stormwater permit, for obstructing, hampering or interfering with an authorized representative while in the process of carrying out his official duties, or for an illegal discharge. Each day of continuing violation shall constitute a separate violation.

(3) The County Engineer, upon consideration of the recommendation of the stormwater administrator, shall assess the civil penalty authorized by this section. The county engineer shall notify the person who is assessed the civil penalty of the amount of the penalty and the reason for assessing the penalty. In determining the amount of the penalty the following factors shall be considered: the degree and extent of harm caused by the violation, the cost, if any, of rectifying the damage, the amount of money the violator saved by noncompliance, whether the violation was committed willfully, and the prior record of the violator in complying or failing to comply with the Act, promulgated rules and this article. The notice of assessment shall be served by certified mail, return receipt requested, or personal service by the sheriff, county engineer, stormwater administrator, or their designee, and shall direct the violator to either pay the assessment or contest the assessment, within 15 days after receipt of the notice of assessment, by requesting a hearing before the board of county commissioners.

(4) If payment is not received within 30 days after the assessment is due, the matter will be referred to the county attorney's office for initiation of a civil action to recover the amount of the civil penalty. An assessment that is not contested is due when the violator is served with a notice of assessment. An assessment that is contested is due at the conclusion of the administrative review of the assessment.

(b) *Criminal penalties.* Violation of this article is punishable as a misdemeanor as provided in section 1-6 of this Code, above.

(Ord. of 2-26-01, § 1)

Sec. 14-161. Appeals.

(a) *Plan and permit denials.* The disapproval or modification of any proposed stormwater control plan or the refusal to issue a stormwater permit by the stormwater administrator, or their designee, shall entitle the person submitting the plan, or applying for the permit, to a hearing before the county engineer if such person submits written demand to the county engineer for a hearing within 15 days after receipt of written notice of disapproval or modifications. This appeal shall specify the factual and/or legal grounds underlying their demand and only such specified grounds may be argued at the hearing. Such hearing will be held within 21 days after the date of the appeal or request for a hearing, or at such later time as the parties mutually agree.

(b) *Civil penalties.* Any person so assessed shall have a right of appeal to the board of county commissioners upon serving written notice of appeal on the clerk to the board within 15 days after the assessed person receives notice of the assessment. This appeal shall specify the factual and/or legal grounds underlying their demand and only such specified grounds may be argued at the hearing. The board of county commissioners shall hold a quasi-judicial hearing and may affirm, increase, reduce or remit the penalty

initially assessed by the county engineer. Appeals from the final decision of the board of county commissioners shall be to the appropriate division of the general court of justice.

(Ord. of 2-26-01, § 1)

Sec. 14-162. Injunctive relief.

(a) Whenever there is reasonable cause to believe that any person is violating or threatening to violate this ordinance or any rule or order adopted or issued pursuant to the Act, this ordinance, or any term, condition or provision of an approved stormwater control plan, the county attorney may, either before or after the institution of any other action or proceeding authorized by this article, institute a civil action in the name of the local government for injunctive relief as provided in section 1-6 of this Code, above, to restrain the violation or threatened violation, or to obtain mandatory relief, in superior court.

(b) The institution of an action for injunctive relief under this section shall not relieve any party to such proceedings from any civil or criminal penalty prescribed for violations of this article, or the Act.

(Ord. of 2-26-01, § 1)

Sec. 14-163. Recordation Requirements.

A deed restriction or restrictive covenants shall be recorded which require compliance with the approved stormwater control plan and stormwater permit, as described in Article V. The deed restriction or restrictive covenants shall provide for enforcement by the County of Durham.

(Ord. of 5-14-07, § 1)